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26M2/0807

EXAMINER	
L.E.H	
ART UNIT	PAPER NUMBER
	15

2608
DATE MAILED:

08/07/95

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on 06/22/95 ☐ This action is made
- A shortened statutory period for response to this action is set to expire 3 (THREE) month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- ☒ Notice of References Cited by Examiner, PTO-892.
- ☐ Notice of Draftsman's Patent Drawing Review, PTO-9
- ☐ Notice of Art Cited by Applicant, PTO-1449.
- ☐ Notice of Informal Patent Application, PTO-152.
- ☐ Information on How to Effect Drawing Changes, PTO-1474.
- ☐

Part II SUMMARY OF ACTION

- ☒ Claims 1-24
Of the above, claims _____ are pending in the application
- ☒ Claims 1-21 are withdrawn from consideration.
- ☐ Claims _____ have been cancelled.
- ☒ Claims 22-24 are allowed.
- ☐ Claims _____ are rejected.
- ☐ Claims _____ are objected to.
- ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
- ☐ Formal drawings are required in response to this Office action.
- ☐ The corrected or substitute drawings have been received on _____ Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
- ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
- ☐ The proposed drawing correction, filed _____ has been ☐ approved; ☐ disapproved (see explanation).
- ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
- ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
- ☐ Other

EXAMINER'S ACTION

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Part III DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 22-24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 22, line 24, "that otherwise would occur" should be deleted because it is vague and indefinite.

In claim 23, lines 21-22, "that otherwise would occur" should be deleted because it is vague and indefinite.

In claim 24, lines 7-8, "low frequency components" lacks antecedent basis; and lines 27-28, "that otherwise would occur" should be deleted because it is vague and indefinite.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of

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this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

3. Claim 22 is rejected under 35 U.S.C. § 103 as being unpatentable over Miller in view of Gauthier, McCabe and further in view of Killion (4,677,679).

Miller teaches that an insert earphone comprises a unitary housing having a hollow body portion (29 and see figure 2). The hollow body portion (11, 29) has an end wall, an open end (see the opening for the cable 18), and a hollow elongated tubular portion (11) extending from the end wall. In addition, Miller shows that an end cap (not numbered, see the end cap for the cable 18) is connected to cover the open end (the opening for the cable of the hollow body portion (29), a cable (16, 18, column 2 lines 56-62) includes plural conductors. Further, Miller shows that a receiver (19) has a sound outlet port (not numbered, see figure 2), a damper (26).

Miller lacks the teaching of a resilient inserting disposed between the receiver and the interior walls of the unitary housing.

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Gauthier teaches that a resilient insert (36) is packed surround the receiver (32). Since Miller and Gauthier teaches a body of the material surrounding the receiver for attenuating and dampening of spurious sound waves entering through the housing, it would have been obvious to one skilled in the art to provide the resilient material, as taught by Gauthier, in order to substitute the body of the liquid in the Miller. This would provide a better material to prevent the mechanical vibrations of the receiver from being transmitted to the housing, and the feedback from the source.

Miller in view of Gauthier does not specifically teach a resilient sealing member disposed over the tubular portion. However, it is very well known in the art to provide a resilient sealing member disposed over the earpiece. McCabe teaches this sealing member (8a, 8b). Therefore, it would have been obvious to one skilled in the art to provide a sealing member, as taught by McCabe, disposed over the tubular portion of the Miller, in order to provide a replaceable eartip to the earpiece.

Miller in view of Gauthier and McCabe does not teach a high fidelity response for the earphone. However, it is very well-known in the art to provide a high-fidelity earphone. Further, Killion teaches a network (40a) in the earphone for providing a high-fidelity response (column 3, lines 42-50 and column 6, lines 44-56). Therefore, it would have been obvious to one skilled in the art to provide a network, as taught by Killion, in the earphone of

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the Miller in view of Gauthier and McCabe in order to provide a high quality sound for the earphone.

4. Claims 23 and 24 are rejected under 35 U.S.C. § 103 as being unpatentable over McCabe in view of Langford and further in view of Killion (4,677,679).

Regarding claims 23 and 24, McCabe teaches that an apparatus comprises an electrical connector (3a, 3b), plural conductors (4a', 4a", 4b', 4b"), and a pair of insert earphones (2a, 2b). The earphones comprise a unitary housing (2a, 2b), a receiver (5), and a resilient sealing member (8a, 8b).

McCabe lacks the teaching of a damper supported within the hollow elongated tubular portion (7a, 7b). However, it is very well-known in the art to provide a damper disposed at the hollow tube which is connected to the ear canal of the wearer. Further, Langford shows this damper (41). Therefore, it would have been obvious to one skilled in the art to provide the damper, as taught by Langford, in the hollow elongated tubular portion of the McCabe headset for attenuating the acoustic of the sound path.

McCabe in view of Langford does not teach a high fidelity response or a filter for the earphone. However, it is very well-known in the art to provide a filter for improving the quality sound of the earphone. Further, Killion teaches a network circuit (40a, 40a', 40b) in the earphone for providing a high-fidelity response (column 3, lines 42-50 and column 6). Therefore, it would

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have been obvious to one skilled in the art to provide a network circuit or the filter, as taught by Killion, in the earphone of the McCabe in view of Langford in order to provide a high quality sound for the earphone.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

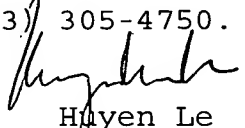
Ambrose teaches a high fidelity earphone or hearing aid.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Le whose telephone number is (703) 305-4844. The examiner can normally be reached on Monday to Friday from 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (703) 305-4708. The fax phone number for this Group is (703) 305-9508.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4750.

HL
August 2, 1995


Huyen Le
Patent Examiner
Group 2600